Maryland Historical Trust

Maryland Inventory of Historic Properties number: F-2-54

Name: MD 26 over Monocacy River

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended _____ Eligibility Not Recommended X

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: Anne E. Bruder _____ Date: 3 April 2001

Reviewer, NR Program: Peter E. Kurtze _____ Date: 3 April 2001

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. F 3-54

SHA Bridge No. 10025 **Bridge name** MD 26 over Monocacy River

LOCATION:
Street/Road name and number [facility carried] MD 26 (Liberty Road)

City/town Ceresville **Vicinity** X

County Frederick

This bridge projects over: Road____ **Railway**_____ **Water** X **Land** ____

Ownership: State X **County** ___ **Municipal** ___ **Other** _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes _____ **No** X
National Register-listed district ____ **National Register-determined-eligible district** ___
Locally-designated district _____ **Other** _____

Name of district _____

BRIDGE TYPE:
Timber Bridge _____:
Beam Bridge _____ **Truss -Covered** ___ **Trestle** ____ **Timber-And-Concrete** ____

Stone Arch Bridge _____

Metal Truss Bridge X

Movable Bridge ____:
Swing _____ **Bascule Single Leaf** __ **Bascule Multiple Leaf** _____
Vertical Lift _____ **Retractile**_____ **Pontoon** _____

Metal Girder_____:
Rolled Girder _____ **Rolled Girder Concrete Encased** _____
Plate Girder _____ **Plate Girder Concrete Encased** _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete ___ :
Concrete Arch_____ **Concrete Slab** __ **Concrete Beam** ____ **Rigid Frame** _____
Other _____ **Type Name** _____

DESCRIPTION:
Setting: Urban _____ **Small town** _X_ **Rural** ___

Describe Setting:

Bridge 10025 carries Maryland Route 26 over the Monocacy River in the vicinity of Ceresville, Frederick County. Route 26 runs generally in an east-west direction in the area while the Monocacy River flows north-south. The bridge is situated in a mixed commercial and residential area. A new bridge has been constructed adjacent to the downstream side of Bridge 10025. Bridge 10025 is currently undergoing rehabilitation and is closed to traffic. When the bridge is reopened it will carry westbound Route 26 across the river.

Describe Superstructure and Substructure:

Bridge 10025, constructed in 1932, is a two-span, camelback truss measuring 100.2 meters (328.81 feet) in total length. Both spans are identical, with eight panels and a length between bearings of 48.76 meters (159.99 feet). The top chord is constructed of steel beams with steel channel lattice bracing connected by rivets. The bottom chord is constructed of steel beams connected with rivets. The floor system has twelve steel stringers and steel floorbeams. All verticals are steel beams and all diagonals are steel channels. All connections are riveted. The width of the roadway is 7.9 meters (26 feet) on the west span and 8.2 meters (27 feet) on the east span. The west span has a distance of 9 meters (29.54 feet) between the centerline of the trusses, while the east span has a distance of 9.3 meters (30.54 feet) between the centerline of the trusses. There is no sidewalk on the bridge and the truss members are protected by concrete highway barriers. The bridge, which is aligned 90° to the streambed, is not posted and has a sufficiency rating of 57.6. The abutments are concrete with flared concrete wing walls, and there is one intermediate concrete pier.

Discuss Major Alterations:

The structure received a new lightweight concrete deck and concrete highway barriers in 1978. The bridge is currently closed to traffic and is in the processes of receiving a new bituminous road surface. The piers and abutments have been altered to accommodate the adjacent metal girder bridge. Inspection reports from 1994 to 1997 were not available in the State Highway Administration (SHA) files for this bridge. The inspection report from 1993, the latest available in the SHA files, indicates the truss members and bearings have areas of rust, there is some traffic damage to the bridge, and the abutments have areas of cracking and spalling.

HISTORY:

WHEN was the bridge built _1932_
This date is: Actual _X_ **Estimated** _____
Source of date: Plaque _____ **Design plans** ___ **State bridge files/inspection form** _X_
Other (specify): Although no plaque was observed during the field survey, state records indicate the bridge previously had a plaque showing the bridge was built by the American Bridge Company in 1932.

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

State Roads Commission

WHO was the builder?

American Bridge Company

WHY was the bridge altered?

The bridge was altered to correct functional or structural deficiencies.

Was this bridge built as part of an organized bridge-building campaign?

There is no evidence that the bridge was built as part of an organized bridge building campaign.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:
A - Events _____ B- Person _____
C- Engineering/architectural character _____

The bridge was previously surveyed by the Frederick County Office of Historic Preservation in 1980; however, a determination of eligibility was not made by the Maryland Historical Trust. The bridge does not have National Register significance.

Was the bridge constructed in response to significant events in Maryland or local history?

This bridge was one of a large number of metal truss bridges built in Maryland in the late nineteenth and early twentieth centuries. Metal trusses built in the late nineteenth century were frequently of wrought iron construction and featured pinned connections. By the turn of the century, steel was the material of choice and connections were sometimes pinned and sometimes rivetted. By 1920, the truss type exhibited more heavily configured members and rivetted connections.

General Truss Bridge Trends

The first metal truss bridges in the United States were built to carry rail and canal traffic. A rapidly expanding railroad network, with needs for long spans, heavy load capacity and rapid construction, served as the impetus for advances in metal truss technology from the mid-nineteenth century to its close. The earliest metal truss forms of the United States were patented and introduced between 1830 and the Civil War, including the popular Pratt (1844) and Warren (1848) types.

From the Civil War through the end of the century metal truss technology improved in response to increasing loads and speeds, and new transportation needs; steel began to replace iron; numerous "bridge works" and "iron works" were established in the eastern U.S. for fabricating and shipping the truss components to the bridge site; and expanding road networks required a low cost, expedient bridge type.

General Trends in Maryland

In Maryland, the earliest metal truss bridges carried rail lines, including the Baltimore & Ohio (B&O) and the Baltimore and Susquehanna Railroads. As early as 1849, B&O Chief Engineer

Benjamin H. Latrobe recommended the construction of metal truss bridges for "large crossings"; in 1850 he reported "much satisfaction" with the future of iron bridges after constructing the metal truss bridge at Savage.

Numerous metal truss bridges were manufactured in Baltimore, the early industrial hub of bridge building activity in the state, from the 1850s through the 1880s. Among the early bridge builders in the 1850s and 1860s were former B&O employees, B.H. Latrobe and Wendell Bollman, founders of competing Baltimore bridge building companies. Historical research identified more than twenty-five bridge companies in the region that built truss bridges in Maryland between 1850 and 1920. Among these were the Wrought Iron Bridge Company, King Iron Bridge Company, Patapsco Bridge and Iron Works, Baltimore Bridge Company, Pittsburg Bridge Company, Penn Bridge Company, Smith Bridge Company, Groton Bridge and Manufacturing Company, Roanoke Iron and Bridge Company, York Bridge Company, Vincennes Bridge Company, Bethlehem Steel Company, American Bridge Company.

The location of the Baltimore & Ohio Railroad, Baltimore bridge fabricators, and the urban needs of the city and its environs resulted in the erection of numerous early truss bridges in Baltimore and the surrounding area. Initially constructed for the railroads, their use quickly came to replace the earlier timber bridges on Baltimore roads.

From Baltimore, the use of the metal truss spread to other parts of the state, with County Commissioners in the Piedmont and Appalachian Plateau counties erecting numerous metal trusses from the 1870s to the early twentieth century. Frederick County erected numerous truss spans during that time. Records indicate that in the early twentieth century the York Bridge Company built a number of metal trusses there, primarily Pratt but also Warren and Parker trusses. In the same county, King Iron Bridge Manufacturing Company erected several bowstring pony truss bridges.

Bridge 10025 is a Camelback truss, a subtype of the Pratt truss. The Pratt truss was first developed in 1844 under patent of Thomas and Caleb Pratt. Prevalent from the 1840s through the early twentieth century, the Pratt has diagonals in tension, verticals in compression, except for the hip verticals immediately adjacent to the inclined end posts of the bridge. Pratt trusses were initially built as a combination wood and iron truss, but were soon constructed in iron only. The Pratt type successfully survived the transition to iron construction as well as the second transition to steel usage. The Pratt truss inspired a large number of variations and modified subtypes during the nineteenth and early twentieth centuries. A Camelback truss is characterized by its distinctive polygonal top chord consisting of exactly five slopes. The Camelback truss was popular for through-spans primarily from its inception in the late nineteenth century through the mid-twentieth century.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

There is no evidence that the construction of this bridge had a significant impact on the growth and development of this area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?

The bridge is located in an area which does not appear to be eligible for historic designation.

Is the bridge a significant example of its type?

The original abutments and piers were modified to accommodate the adjacent bridge, resulting in the loss of important character-defining elements. In addition, while the bridge is recognizable as an historic structure, the historic setting and associations of the bridge have been severely compromised by the construction of an adjacent metal girder bridge.

Does the bridge retain integrity of important elements described in Context Addendum?

This bridge is currently undergoing rehabilitation, and was altered in 1996-1997, resulting in the alteration of such character-defining elements as the original abutments and piers.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?

The bridge is not a significant example of the work of a manufacturer, designer, and/or engineer.

Should the bridge be given further study before an evaluation of its significance is made?

No further study of this bridge is required to evaluate its significance.

BIBLIOGRAPHY:

County inspection/bridge files ___ **SHA inspection/bridge files** X
Other (list):

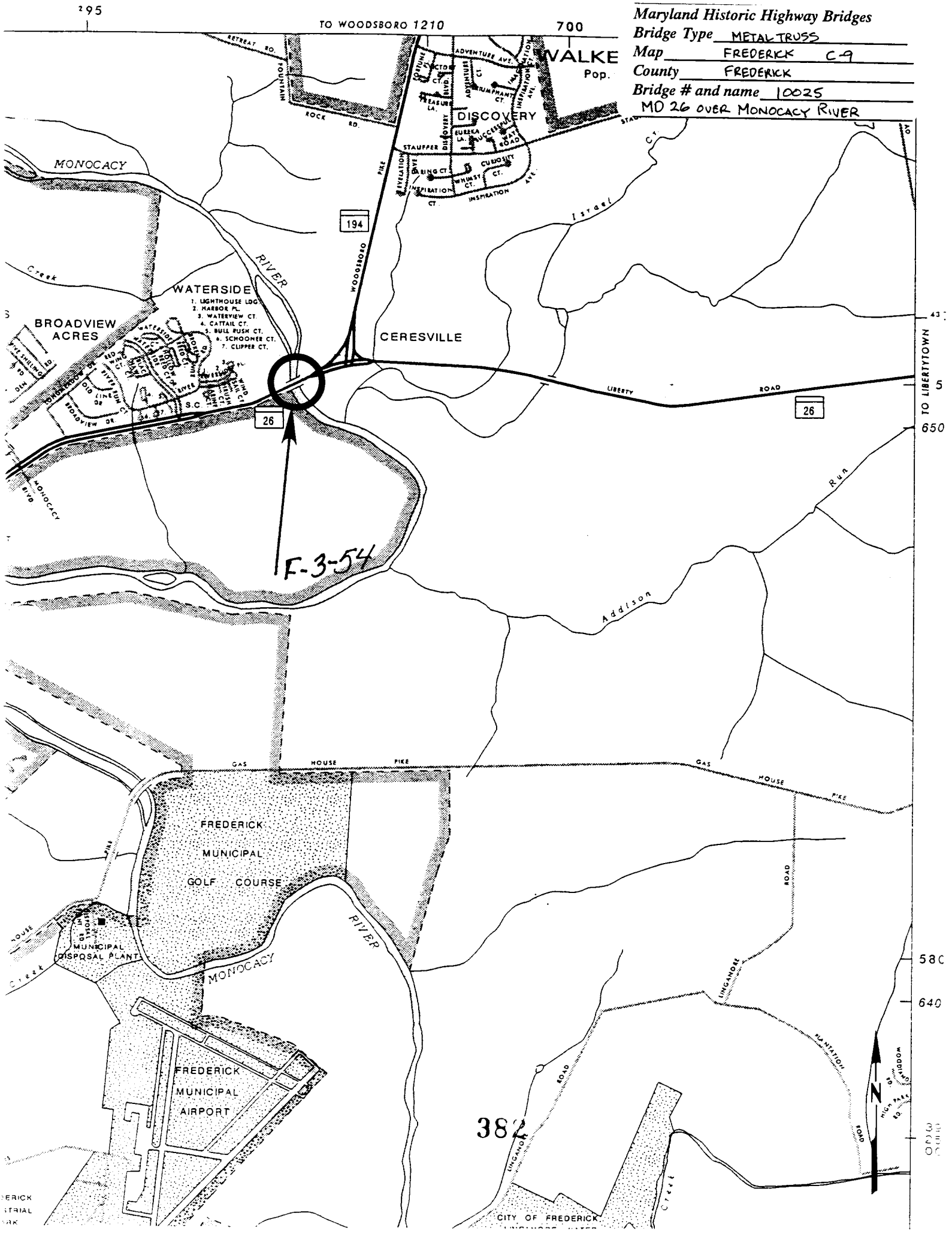
Frederick County Office of Historic Preservation, *Maryland Historical Trust Inventory Form for State Historic Sites Survey #F 3-54.* 1980.

P.A.C. Spero & Company and Louis Berger & Associates, *Historic Highway Bridges in Maryland: Historic Context Report.* Prepared for the Maryland State Highway Administration.

SURVEYOR:

Date bridge recorded July 1997

Name of surveyor Caroline Hall/Ryan McKay
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Suite 412, Baltimore, Maryland 21204
Phone number 410-296-1635 **FAX number** 410-296-1670


Maryland Historic Highway Bridges
Bridge Type METAL TRUSS
Map FREDERICK C-9
County FREDERICK
Bridge # and name 10025
MD 26 OVER MONOCACY RIVER
295
TO WOODSBORO 1210
700
WALKE
Pop.
DISCOVERY
MONOCACY
RIVER
WATERSIDE
1. LIGHTHOUSE LDG.
2. HARBOR PL.
3. WATERVIEW CT.
4. CATTAIL CT.
5. BULL RUSH CT.
6. SCHOONER CT.
7. CLIPPER CT.
BROADVIEW ACRES
CERESVILLE
WOODSBORO PIKE
194
26
LIBERTY ROAD
TO LIBERTYTOWN
650
F-3-54
Addison Run
GAS HOUSE PIKE
FREDERICK MUNICIPAL GOLF COURSE
MUNICIPAL DISPOSAL PLANT
FREDERICK MUNICIPAL AIRPORT
LINGANORE ROAD
580
640
382
CITY OF FREDERICK
N

1. F-3-54
2. 10025, MD 26 over Monocacy River
3. Frederick County MD
4. Ryan McKay
5. July 1997
6. MD SHA
7. East approach
8. 1 of 3

1. F-3-54
2. 10035, MD 28 over Monocacy River
3. Frederick County, MD
4. Ryan McKay
5. July 2007
6. MD SHPO
7. West approach
8. 2 of 3

1. F-3-54
2. [illegible], MD 2[illegible] over Monocacy Riv
3. Frederick County, MD
4. Ryan Metray
5. July [illegible]
6. MD SHPO
7. Downstream Elevation
8. 3 of 3

F-3-54 1932
Maryland Route 26/Monocacy River Bridge
Ceresville vicinity
public (unrestricted)

This bridge, which carries Maryland Route 26 over the Monocacy River near Ceresville, Maryland, consists of two camelback steel through trusses, each measuring 160 feet in length. A concrete bent supports the junction of the two trusses, which in turn support a 27 foot wide roadway.

Erected in 1932, this structure was built by the American Bridge Company. The Maryland Route 26/Monocacy River Bridge is one of six historic truss bridges -- part of Maryland's state road system in Frederick County, and one of 26 bridges of the same structural type throughout the state road network -- identified by the Maryland Historical Trust for the Maryland Department of Transportation in a jointly conducted survey produced during 1980-81.

10025

MARYLAND HISTORICAL TRUST

F-III-54

MAGI # [redacted] 2345

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC

AND/OR COMMON

Maryland 26/Monocacy River Bridge

2 LOCATION

STREET & NUMBER

CITY, TOWN
Ceresville

X VICINITY OF

CONGRESSIONAL DISTRICT
6th

STATE
Maryland

COUNTY
Frederick

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	X PUBLIC	X OCCUPIED	__AGRICULTURE	__MUSEUM
__BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
X STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	X YES: UNRESTRICTED	__INDUSTRIAL	X TRANSPORTATION
		__NO	__MILITARY	__OTHER

4 OWNER OF PROPERTY

NAME
State Highway Administration DOT Survey Telephone #:

STREET & NUMBER
301 West Preston Street

CITY, TOWN
Baltimore

__ VICINITY OF

STATE, zip code
Maryland 21201

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE
REGISTRY OF DEEDS ETC. Frederick County Courthouse

Liber #:
Folio #:

STREET & NUMBER

CITY, TOWN
Frederick

STATE
Maryland

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

__FEDERAL __STATE __COUNTY __LOCAL

DEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
_EXCELLENT	_DETERIORATED	X UNALTERED	X ORIGINAL SITE
X GOOD	_RUINS	_ALTERED	_MOVED DATE_____
_FAIR	_UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

This bridge, which carries Maryland Route 26 across the Monocacy in and E-W direction consists of two camelback steel through trusses of 160' in length each. The junction of the trusses is supported on a concrete bent. All connections are riveted. The roadway is 27' wide across the structure.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

F-2-51

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION	
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE	
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE	
__1600-1699	__ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN	
__1700-1799	__ART	X ENGINEERING	__MUSIC	__THEATER	
__1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	X TRANSPORTATION	
X 1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)	
		__INVENTION			

SPECIFIC DATES 1932 BUILDER/ARCHITECT American Bridge Company

STATEMENT OF SIGNIFICANCE

See M/DOT Survey general bridge significance, attached.

CONTINUE ON SEPARATE SHEET IF NECESSARY

F-3-54

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Files of the Bureau of Bridge Design, State Highway Administration, 301 West Preston Street, Baltimore, Md. drawer 92.

Condit, Carl, American Building Art, 20th Century; New York, Oxford University Press, 1961.

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

Quadrangle Name: Walkersville, MD

Quadrangle Scale: 1:24 000

UTM References:

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	COUNTY
STATE	COUNTY

11 FORM PREPARED BY

NAME / TITLE

John Hnedak/M/DOT Survey Manager

ORGANIZATION: Maryland Historical Trust

DATE: 1980

STREET & NUMBER: 21 State Circle

TELEPHONE: (301) 269-2438

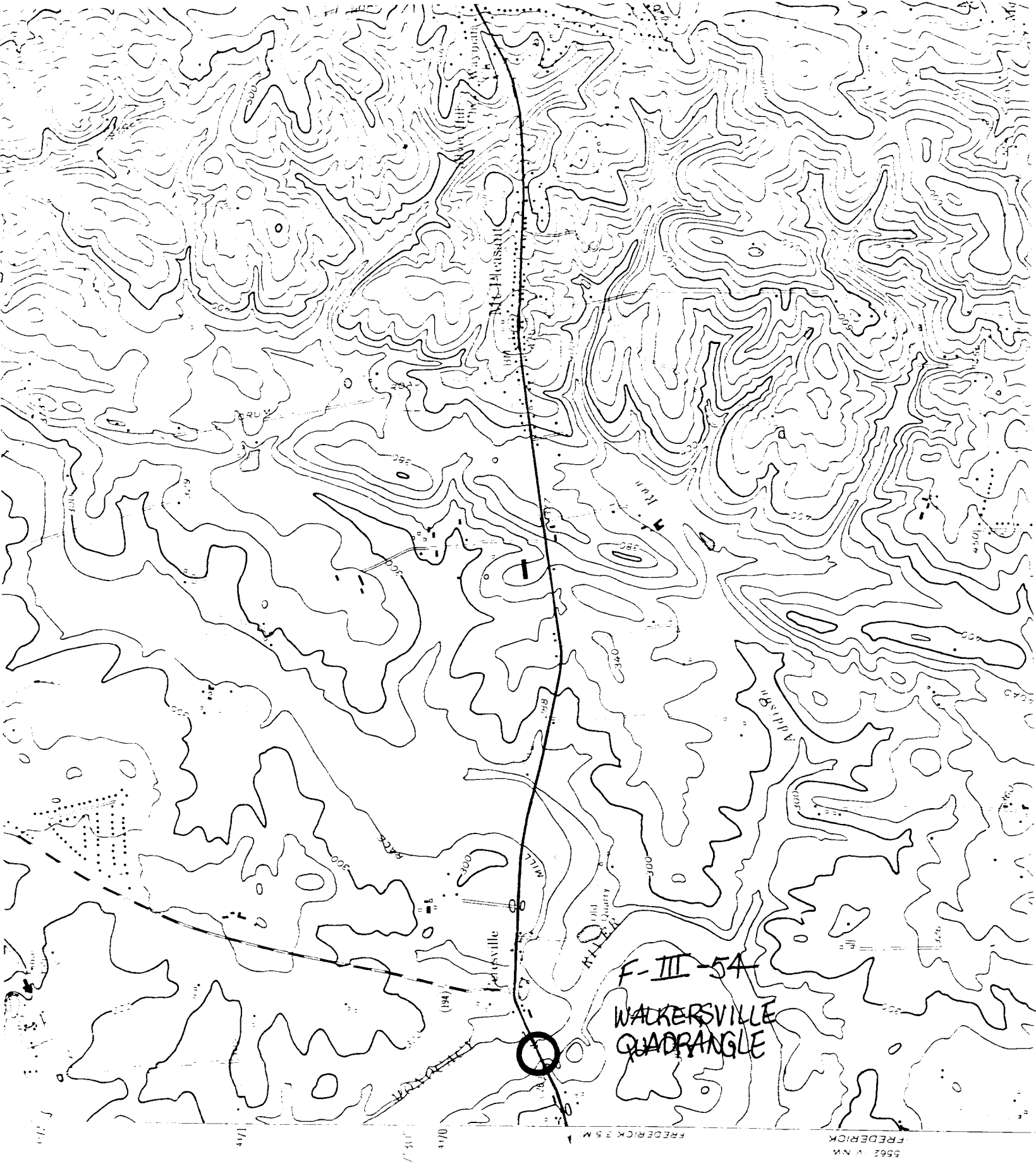
CITY OR TOWN: Annapolis

STATE: Maryland 21401

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

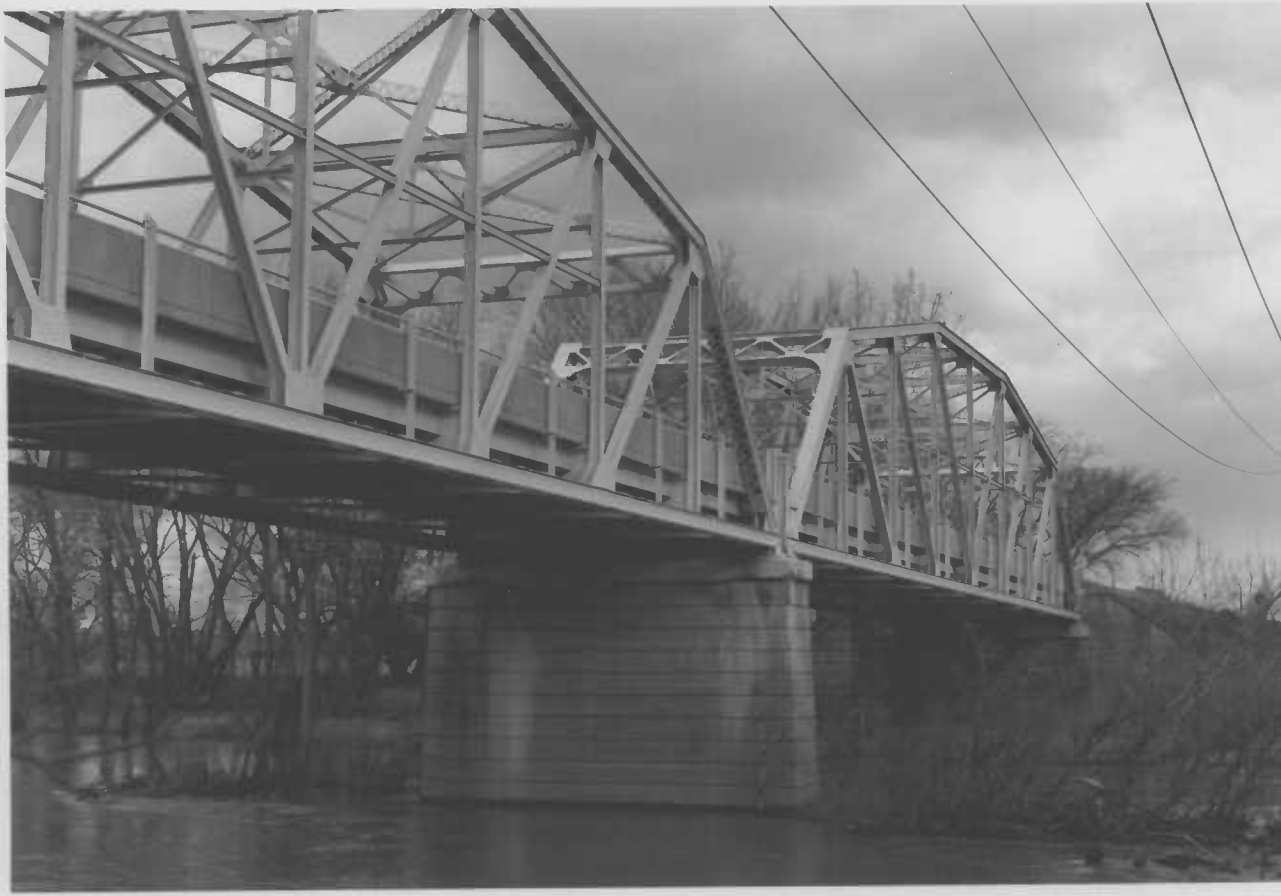
The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust
The Shaw House, 21 State Circle
Annapolis, Maryland 21401
(301) 267-1438


F-III-54
WALKERSVILLE
QUADRANGLE


AMERICAN BRIDGE
COMPANY
U.S.A. 1932
10025
Discovery

F-III-54
Md 26/ Monocacy
M/DOT
Hnedak/Meyer
Autumn 1980



F-III-54
Md 26/Monocacy
M/DOT
Hnedak/Meyer
Autumn 1980